

shell and coral which had escaped from it. The ventral vessel and nerve-cord were conspicuous.

As only one specimen of this species has hitherto been described, it is peculiarly unfortunate that the state of preservation of the one I had precluded minuter investigation.

EXPLANATION OF PLATE XXXVII.

- Fig. 1. *S. rotumanus*, n. sp., p. 469. Head, $\times 4$.
 2. " " Anus and surrounding skin, $\times 4$.
 3. " " A portion of the skin to show the densely black papillæ and the arrangement of the circular muscles, $\times 4$.
 4. *S. funafuti*, n. sp., p. 470. The œsophagus in this specimen is slightly everted in the centre of the crown of tentacles. Nat. size.
 5. *S. funafuti*, n. sp. A piece of skin from the middle of the body showing the longitudinal and circular muscles and the scattered papillæ. Highly magnified.
 6. *Physosoma pacificum* Kef., p. 470. The posterior narrow tail of the animal, showing the last loop of the intestine, the spindle-muscle, and the backward extension of the nephridia—black—to the extreme posterior end of the body. Nat. size.
 7. *Physosoma microdontoton* Sluit., p. 471. *a.* Entire animal, $\times 4$. *b.* Head viewed *en face*, $\times 12$.
 8. *Aspidosiphon elegans* Cham. & Eysenh., p. 471. *a.* Entire animal, $\times 2$. *b.* Anus and anterior shield, $\times 5$. *c.* Posterior shield, $\times 10$. *d.* Hook, highly magnified.
 9. *Aspidosiphon klunzingeri* Sel. & Bülow, p. 471. *a.* Entire animal, $\times 2$. *b.* Posterior shield, $\times 4$. *c.* Anterior shield, $\times 4$.
 10. *Claosiphon aspergillum* Quatr., p. 471. *a.* Entire animal, $\times 2$. *b.* A few papillæ, more highly magnified.
 11. *Thalassema caudex* Lamp., p. 472. Ventral view, nat. size.
 12. *Thalassema vegrande* Lamp., p. 472. Ventro-lateral view, $\times 1.5$.

3. Fourth Report on Additions to the Batrachian Collection in the Natural-History Museum.¹ By G. A. BOULENGER, F.R.S.

[Received May 17, 1898.]

(Plates XXXVIII. & XXXIX.)

Owing to the increasing attention paid by zoological collectors to this much neglected group of Vertebrates, the number of species of Tailless Batrachians represented in the National Collection is steadily rising. In the Second Report, published in 1890, I pointed out that the increase in the number of species of which specimens had been acquired has been at the rate of 10 per annum from 1858 to 1868, of 15 from 1868 to 1882, of 16 from 1882 to 1886, and of $18\frac{1}{2}$ from 1886 to 1890. It has risen to $19\frac{1}{4}$ from 1890 to 1894, and to $28\frac{1}{2}$ from 1898 to the present date, as shown by the following list.

A proportional increase in the additions to the collection of Tailed Batrachians is also observable on comparison with the previous lists.

¹ Cf. P. Z. S. 1894, p. 640.

The following table shows the number of species enumerated in the four Reports drawn up since the publication of the British Museum Catalogue of Batrachians in 1882:—

First Report (1886).	<i>Ecaudata</i> :	63.	<i>Caudata</i> :	4.	<i>Apoda</i> :	7.
Second " (1890).	" "	74.	" "	3.	" "	3.
Third " (1894).	" "	77.	" "	2.	" "	4.
Fourth " (1898).	" "	115.	" "	10.	" "	4.
Total :	" "	329.	" "	19.	" "	18.

I. *List of the Species, new or previously unrepresented, specimens of which have been added to the Collection since the last Report*¹.

(An asterisk indicates type specimens.)

ECAUDATA.

1. *Oxyglossus martensii* Ptrs.—Siam (*Siamese Mus.*).
2. *Rana leitensis* Bttgr. Zool. Anz. 1893, p. 365.—Sooloo Islands (*Everett*), Borneo (*Cator*), Celebes (*Everett*).
3. *Rana microdisca* Bttgr. Ber. Offenb. Ver. Nat. 1892, p. 137.—Celebes (*Sarasin*), Flores (*Everett*).
4. *Rana hascheana* Stol.—Great Natuna (*Everett*).
- *5. *Rana pulchra* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 468.—L. Tanganyika (*Nutt*).
6. *Rana ornata* Ptrs.—Gallaland (*Donaldson Smith*), Somaliland (*Bottego*).
7. *Rana newtoni* Bocage, Journ. Sc. Lisb. xlii. 1886, p. 70.—S. Thomé (*Moller*).
- *8. *Rana nutti* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 467.—L. Tanganyika (*Nutt, Moore*).
- *9. *Rana luzonensis* Blgr. op. cit. xvii. 1896, p. 401.—Luzon (*Whitehead*).
- *10. *Rana florensis* Blgr. op. cit. xix. 1897, p. 508.—Flores (*Everett*).
- *11. *Rana macrops* Blgr. P. Z. S. 1897, p. 233.—Celebes (*Sarasin*).
- *12. *Cornufer baluensis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 449.—Borneo (*Everett*).
- *13. *Phrynobatrachus perpalmatus* Blgr. *infra*, p. 479.—L. M'wero, C. Africa (*Moore*).
- *14. *Oreobatrachus batuensis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 401.—Borneo (*Everett*).
- *15. *Arthroleptis whytii* Blgr. P. Z. S. 1897, p. 802.—L. Nyassa (*Johnston*).

¹ In order to explain the inconsistencies that occur in the terminations of personal names, used to designate species, in the lists published by me in these 'Proceedings,' I wish to point out that these are due to editorial supervision, changes being made without my knowledge or consent.

- *16. *Arthroleptis bottegi* Blgr. Ann. Mus. Genova, (2) xv. 1895, p. 16.—Somaliland (*Bottego*).
- *17. *Arthroleptis minutus* Blgr. P. Z. S. 1895, p. 539.—Somaliland (*Donaldson Smith*).
- *18. *Arthroleptis noorii* Blgr. *infra*, p. 479.—L. Tanganyika (*Moore*).
- *19. *Mantidactylus majori* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 420.—Madagascar (*Forsyth Major*).
- 20. *Mantidactylus albofrenatus* F. Müller, Verh. nat. Ges. Basel, x. 1892, p. 197.—Madagascar (*Majastre, Forsyth Major*).
- *21. *Rhacophorus majori* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 404.—Madagascar (*Forsyth Major*).
- *22. *Rhacophorus mocquardi* Blgr. t. c. p. 402.—Madagascar (*Majastre*).
- *23. *Rhacophorus peraccae* Blgr. op. cit. xviii. 1896, p. 421.—Madagascar (*Forsyth Major*).
- *24. *Rhacophorus macroscelis* Blgr. op. cit. xvii. 1896, p. 404.—Borneo (*Everett*).
- *25. *Rhacophorus hosii* Blgr. op. cit. xvi. 1895, p. 169.—Borneo (*Hose*).
- *26. *Rhacophorus monticola* Blgr. op. cit. xvii. 1896, p. 395.—Celebes (*Everett, Sarasin*).
- *27. *Rhacophorus fasciatus* Blgr. op. cit. xvi. 1895, p. 169.—Borneo (*Hose*).
- *28. *Rhacophorus nigropalmatus* Blgr. t. c. p. 170.—Borneo (*Hose*).
- 29. *Rhacophorus brachychir* Bttgr. Zool. Anz. 1882, p. 480.—Madagascar (*Majastre*).
- 30. *Chiromantis verampelina* Ptrs.—Brit. E. Africa (*Ansorge, Betton*).
- *31. *Ixalus vittiger* Blgr. Ann. & Mag. N. H. (6) xix. 1897, p. 106.—Java (*Fruhstorfer*).
- *32. *Ixalus leitensis* Blgr. t. c. p. 107.—Leyte, Philippines (*Whitehead*).
- *33. *Ixalus mindorensis* Blgr. l. c.—Mindoro (*Whitehead*).
- 34. *Ixalus bimaculatus* Ptrs.—Borneo (*Everett*).
- 35. *Rappia thomensis* Bocage, Jorn. Sc. Lisb. xlii. 1886, p. 74.—S. Thomé (*Moller*).
- 36. *Rappia quinquevittata* Bocage.—Stanley Falls.
- 37. *Rappia tristis* Bocage.—Lower Congo.
- *38. *Rappia mollerii* Bedriaga, Amph. Rept. Guinée (1892), p. 10.—St. Thomé (*Moller*).
- 39. *Rappia rutenbergii* Bttgr.—Madagascar (*Greening*).
- *40. *Megalixalus brachycnemis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 404.—Nyassaland (*Johnston*).
- *41. *Megalixalus gramineus* Blgr. Ann. Mus. Genova, (2) xviii. 1893, p. 721.—L. Rudolf (*Bottego*).
- *42. *Hylambates johnstoni* Blgr. P. Z. S. 1897, p. 803.—Nyassaland (*Johnston*).

- *43. *Phyllobates infraguttatus* Blgr. op. cit. 1898, p. 118.—Ecuador (*Rosenberg*).
- 44. *Colostethus latinasus* Cope.—Colombia and Ecuador (*Rosenberg*).
- *45. *Oreophrynella quelchii* Blgr. Ann. & Mag. N. H. (6) xvi. 1895, pp. 125, 522.—Brit. Guiana (*Quelch*).
- 46. *Sphenophryne cornuta* Ptrs. & Doria.—New Guinea (*van Renesse*).
- *47. *Sphenophryne verrucosa* Blgr. Ann. Mus. Genova, (2) xviii. 1898, p. 707.—New Guinea (*Anthony*).
- *48. *Sphenophryne loriae* Blgr. l. c.—New Guinea (*Loria*).
- *49. *Sphenophryne ateles* Blgr. t. c. p. 708.—New Guinea (*Loria*).
- 50. *Sphenophryne biroi* Mchely, Term. Füzet. Budapest, xx. 1897, p. 411.—New Guinea (*Loria*).
- *51. *Sphenophryne anthonyi* Blgr. Ann. & Mag. N. H. (6) xix. 1897, p. 10.—New Guinea (*Anthony*).
- *52. *Sphenophryne monticola* Blgr. t. c. p. 508.—Lombok (*Everett*).
- *53. *Sphenophryne variabilis* Blgr. op. cit. xviii. 1896, p. 64.—Celebes (*Sarasin, Everett*).
- 54. *Calophrynus calcaratus* Mocq. Bull. Soc. Philom. (8) vii. 1895, p. 108.—Madagascar.
- *55. *Calophrynus brevis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 403.—Madagascar (*Last*).
- *56. *Engystoma borneense* Blgr. op. cit. xix. 1897, p. 108.—Borneo (*Hose*).
- *57. *Microhyla palmipes* Blgr. l. c.—Java (*Fruhstorfer*).
- *58. *Microhyla bungurana* Gthr. Nov. Zool. ii. 1895, p. 501.—Great Natuna (*Everett*).
- *59. *Phryniwalus oxyrhinus* Blgr. *infra*, p. 480.—St. Aignan Island, New Guinea (*Meek*).
- *60. *Mantophryne lateralis* Blgr. Ann. & Mag. N. H. (6) xix. 1897, p. 12.—New Guinea (*Anthony*).
- *61. *Mantophryne robusta* Blgr. *infra*, p. 480.—St. Aignan Island, New Guinea (*Meek*).
- *62. *Liophryne rhododactyla* Blgr. Ann. & Mag. N. H. (6) xix. 1897, p. 11.—New Guinea (*Anthony*).
- *63. *Liophryne brevis* Blgr. l. c.—New Guinea (*Anthony*).
- *64. *Xenorhina atra* Gthr. Nov. Zool. iii. 1896, p. 184.—New Guinea (*Day*).
- *65. *Dyscophus grandidieri* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 404.—Madagascar (*Last*).
- *66. *Hylodes anomalus* Blgr. P. Z. S. 1898, p. 119.—Ecuador (*Rosenberg*).
- *67. *Hylodes raniformis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 19.—Colombia (*Rosenberg*).
- 68. *Hylodes ranoides* Cope, Proc. Amer. Philos. Soc. xxiii. 1886, p. 275.—Nicaragua (*Rothschuh*), Costa Rica (*Underwood*).

- *69. *Hylodes underwoodi* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 340.—Costa Rica (*Underwood*).
- *70. *Hylodes longirostris* Blgr. P. Z. S. 1898, p. 120.—Ecuador (*Rosenberg*).
- *71. *Hylodes achatinus* Blgr. l. c.—Ecuador (*Rosenberg*).
- *72. *Hylodes alfredi* Blgr. *infra*, p. 480.—Vera Cruz, Mexico (*Dugès*).
- 73. *Hylodes rugosus* Ptrs.—Nicaragua (*Rothschuh*).
- *74. *Hylodes gularis* Blgr. P. Z. S. 1898, p. 121.—Ecuador (*Rosenberg*).
- *75. *Hylodes discoidalis* Peracca, Boll. Mus. Torin. x. 1895, no. 195, p. 24.—Tucuman (*Turin Mus.*)
- *76. *Hylodes bufoniformis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 19.—Colombia (*Rosenberg*).
- *77. *Hylodes latidiscus* Blgr. P. Z. S. 1898, p. 121.—Ecuador (*Rosenberg*).
- *78. *Hylodes erythropleura* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 20.—Colombia (*Rosenberg*).
- 79. *Hylodes cerasinus* Cope.—Costa Rica (*Underwood*).
- 80. *Hylodes polyptychus* Cope, Proc. Amer. Philos. Soc. xxiii. 1886, p. 276.—Nicaragua (*Rothschuh*), Costa Rica (*Underwood*).
- *81. *Syrnhopus areolatus* Blgr. P. Z. S. 1898, p. 122.—Ecuador (*Rosenberg*).
- 82. *Ceratophrys cristiceps* F. Müller, Verh. nat. Ges. Basel, vii. 1883, p. 279.—Rio Janeiro (*Greening*).
- *83. *Paludicola borellii* Peracca, Boll. Mus. Torin. x. 1895, no. 195, p. 26.—Tucuman (*Turin Mus.*).
- *84. *Leptodactylus pulcher* Blgr. P. Z. S. 1898, p. 122.—Ecuador (*Rosenberg*).
- *85. *Leptodactylus maculilabris* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 404.—Costa Rica (*Underwood*).
- *86. *Borborocætes mexicanus* Blgr. *infra*, p. 481.—Zacatecas, Mexico (*Buller*).
- *87. *Chiroleptes dahlii* Blgr. P. Z. S. 1895, p. 687.—N. Australia (*Dahl*).
- *88. *Nectophryne macrotis* Blgr. Ann. & Mag. N. H. (6) xvi. 1895, p. 171.—Borneo (*Hose*).
- *89. *Nectophryne everetti* Blgr. op. cit. xvii. 1896, p. 450.—Borneo (*Everett*).
- 90. *Bufo penangensis* Stol.—Borneo (*Everett*).
- 91. *Bufo steindachneri* Pfeff. Jahrb. Hamb. Wiss. Anst. x. 1893, p. 103.—Gallaland (*Bottego*).
- *92. *Bufo dodsoni* Blgr. P. Z. S. 1895, p. 540.—Somaliland (*Donaldson Smith*).
- *93. *Bufo dombensis* Bocage, Jorn. Sc. Lisb. (2) xiii. 1895, p. 50.—Angola (*Anchieta*).
- 94. *Bufo taitanus* Ptrs.—L. Tanganyika (*Nutt*), Somaliland (*Bottego*).

95. *Bufo coniferus* Cope.—Costa Rica (*Underwood*), Ecuador (*Rosenberg*).
96. *Bufo coccifer* Cope.—Costa Rica (*Underwood*).
- *97. *Hyla rosenbergii* Blgr. P. Z. S. 1898, p. 123.—Ecuador (*Rosenberg*).
98. *Hyla gabbii* Cope.—Costa Rica (*Underwood*).
99. *Hyla gratiosa* Leconte.—Florida (*Brimley*).
100. *Hyla puma* Cope, Proc. Amer. Philos. Soc. xxii. 1885, p. 183.—Costa Rica (*Underwood*).
- *101. *Hyla microcephala* Blgr. *infra*, p. 481.—Costa Rica (*Underwood*).
- *102. *Hyla variabilis* Blgr. Ann. & Mag. N. H. (6) xvii. 1896, p. 20.—Colombia (*Rosenberg*).
- *103. *Hyla rueppellii* Bttgr. Zool. Anz. 1895, p. 137.—Halmaheira (*Kükenthal*).
- *104. *Hyla fallax* Blgr. *infra*, p. 482.—New Guinea (*Doria*).
- *105. *Hyla everetti* Blgr. Ann. & Mag. N. H. (6) xix. 1897, p. 509.—Sumba, Savu, Ombai, Timor (*Everett*).
- *106. *Hyla impura* Ptrs. & Doria.—New Guinea (*Biro*).
107. *Nototrema bolivianum* Stdr. Sitzb. Ak. Wien, ci. 1892, p. 840.—Bolivia (*Rolle*).
- *108. *Nototrema angustifrons* Blgr. P. Z. S. 1898, p. 124.—Ecuador (*Rosenberg*).
- *109. *Nototrema cornutum* Blgr. l. c.—Ecuador (*Rosenberg*).
- *110. *Hylella parabamba* Blgr. t. c. p. 125.—Ecuador (*Rosenberg*).
- *111. *Hylella punctatus* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 341.—Costa Rica (*Underwood*).
- *112. *Nyctimantis papua* Blgr. op. cit. xix. 1897, p. 12.—New Guinea (*Anthony*).
- *113. *Corythomantis greeningi* Blgr. op. cit. xvii. 1896, p. 405.—Espírito Santo, Brazil (*Greening*).
- *114. *Pelodytes caucasicus* Blgr. t. c. p. 406.—Caucasus (*Radde*).
- *115. *Leptobrachium natunæ* Gthr. Nov. Zool. ii. 1895, p. 501.—Great Natuna I. (*Everett*).

CAUDATA.

- *1. *Molge italica* Peracca, Boll. Mus. Torin. xiii. 1898, no. 317.—S. Italy (*Peracca*).
2. *Amblystoma talpoideum* Holbr.—Mississippi (*Brimley*).
- *3. *Amblystoma altamirani* Dugès, Natureza, ii. 1896, p. 459.—Mexico (*Dugès*).
4. *Amblystoma annulatum* Cope, Proc. Amer. Philos. Soc. xxiii. 1886, p. 525.—Arkansas (*Brimley*).
5. *Autodax iecanus* Cope, Proc. Ac. Philad. 1883, p. 24.—California (*Gilbert, Van Denburgh*).
- *6. *Spelerpes subpalmatus* Blgr. Ann. & Mag. N. H. (6) xviii. 1896, p. 341.—Costa Rica (*Underwood*).
7. *Spelerpes bocourti* Brocchi, Miss. Sc. Mex., Batr. p. 111 (1882).—Costa Rica (*Underwood*).

8. *Spelerpes altamazonicus* Cope.—Colombia (*Pratt*).
- *9. *Desmognathus brimleyorum* Stejn. Proc. U.S. Nat. Mus. xvii. 1895, p. 597.—Arkansas (*Brimley*).
- *10. *Typhlomolge rathbuni* Stejn. op. cit. xviii. 1896, p. 620.—Texas (*U.S. Nat. Mus.*).

APODA.

1. *Hypogeophis alternans* Stejn. Proc. U.S. Nat. Mus. xvi. 1894, p. 739.—Seychelles (*Paris Mus.*).
- *2. *Bdellophis vittatus* Blgr. P. Z. S. 1895, p. 412.—German E. Africa (*Werner*).
- *3. *Boulengerula boulengeri* Tornier, Thierw. O.-Afr., Rept. Amph. p. 164 (1896).—German E. Africa (*Berlin Mus.*).
4. *Siphonops brasiliensis* Rhdt.—Sta. Catharina (*Prague Museum*).

II. Descriptions of new Species.

1. PHRYNOBATRACHUS PERPALMATUS. (Plate XXXVIII. fig. 1.)

Tongue with a conical median papilla. Habit ranoid. Head small; snout short, subacuminate, without canthus; interorbital space convex, a little narrower than the upper eyelid; tympanum feebly distinct, two thirds the diameter of the eye. First finger not extending quite so far as second; toes entirely webbed, with very slightly swollen tips; subarticular tubercles small; two small metatarsal tubercles and a third tubercle in the middle of the inner edge of the tarsus. The tibio-tarsal articulation reaches the eye, the tarso-metatarsal a little beyond the tip of the snout. Skin feebly warty above. Brown above, with small dark spots; a dark, light-edged streak on each side from the eye to the groin, involving the tympanum; a dark cross-bar on the thigh and another on the tibia; hinder side of thighs white, with a wavy blackish band; lower parts white, throat with some brown dots; two brown streaks or series of spots on the lower surface of the thighs.

Total length 22 millim.

Two specimens were obtained about Lake Mweru by Mr. J. E. S. Moore on his expedition to Lake Tanganyika.

2. ARTHROLEPTIS MOORII. (Plate XXXVIII. fig. 2.)

Tongue with a conical median papilla. Head moderate, as long as broad; snout rounded, as long as the eye; nostril nearer the end of the snout than the eye; interorbital space as broad as the upper eyelid; tympanum indistinct, two thirds the diameter of the eye. First and second fingers equal, more than half as long as third; toes webbed at the base, tips slightly swollen; subarticular tubercles small; two very small metatarsal tubercles, and a third tubercle in the middle of the inner edge of the tarsus. The tibio-tarsal articulation reaches the tip of the snout. Skin smooth. Olive above; a triangular dark spot, the apex turned backwards, between the eyes; a **Λ**-shaped dark marking

between the shoulders, and dark bars across the limbs; lower parts white.

From snout to vent 20 millim.

A single specimen from Kinyamkolo, Lake Tanganyika (*J. E. S. Moore*).

3. *PHRYNIXALUS OXYRHINUS*. (Plate XXXVIII. fig. 3.)

Tongue oval, rather narrow, free in its posterior third; palatine ridges strong. Head as long as broad; snout pointed, very prominent; nostril a little nearer the end of the snout than the eye; canthus rostralis rounded; loreal region almost vertical; interorbital space twice as broad as the upper eyelid; tympanum vertically oval, about three fourths the size of the eye. Fingers and toes dilated into small but well-developed disks; subarticular tubercles feebly prominent; first finger shorter than the second; a feebly prominent, oval inner metatarsal tubercle. The tibio-tarsal articulation reaches the eye. Skin smooth. Pale grey above, with dark brown spots and marblings, which are largest on the sides; sides of head dark brown; groin and hinder side of thighs whitish, with black spots or marblings; white beneath.

From snout to vent 28 millim.

Five specimens from St. Aignan I., south of Fergusson I., British New Guinea; collected by Mr. Meek.

4. *MANTOPHYRNE ROBUSTA*. (Plate XXXVIII. fig. 4.)

Habit stout. Head subtriangular, much broader than long; snout obtusely pointed, prominent, shorter than the diameter of the orbit; canthus rostralis indistinct; loreal region oblique, slightly concave; nostril nearer the tip of the snout than the eye; interorbital space as broad as the upper eyelid; tympanum about two thirds the diameter of the eye. Fingers and toes rather short, with small terminal disks and feebly prominent subarticular tubercles; first finger a little shorter than the second; a feebly prominent, oval inner metatarsal tubercle. The tibio-tarsal articulation reaches the shoulder or the tympanum. Skin smooth, shiny; a strong fold from the eye to the shoulder. Reddish or purplish brown above, uniform or with small black spots; lower parts pale brown.

From snout to vent 71 millim.

Three specimens from St. Aignan I., south of Fergusson I., British New Guinea; collected by Mr. Meek.

5. *HYLODES ALFREDI*. (Plate XXXIX. fig. 1.)

Tongue subcircular, entire or indistinctly nicked behind. Vomerine teeth in two short transverse groups behind the level of the choanæ. Head much depressed; snout short, rounded; nostril near the tip of the snout; canthus rostralis distinct; loreal region concave; interorbital space as broad as the upper eyelid; tympanum very distinct, two thirds the diameter of the eye. First finger a little shorter than second; disks of fingers large,

truncate, subtriangular, their diameter nearly equalling that of the tympanum; toes free, the disks a little smaller than those of the fingers; subarticular tubercles moderately large, very prominent; two small metatarsal tubercles. The tibio-tarsal articulation reaches the tip of the snout. Skin smooth above and beneath. Greyish above, speckled with blackish, white beneath.

From snout to vent 36 millim.

Two specimens from Atoyac, State of Vera Cruz. Presented by Dr. Alfred Dugès, after whom the species is named.

6. *BORBOROCETES MEXICANUS*. (Plate XXXIX. fig. 2.)

Tongue oval, entire. Vomerine teeth in two rounded groups behind the level of the choanæ. Snout rounded, a little longer than the diameter of the orbit; nostril nearer the end of the snout than the eye; canthus rostralis rounded; interorbital space a little broader than the upper eyelid; tympanum distinct, two thirds the diameter of the eye. Fingers moderate, first extending beyond second; toes moderate, free; subarticular tubercles of fingers and toes very strong; a large and very prominent, compressed inner metatarsal tubercle and a small, rounded outer metatarsal tubercle. The tibio-tarsal articulation reaches between the eye and the nostril. Skin smooth. Olive-grey above, with small darker markings; a dark cross-bar between the eye; a dark lumbar marking; a dark streak on each side of the head and body, not reaching the groin; lips with vertical dark bars; limbs with dark cross-bars; lower parts white; sides of throat speckled with brown.

From snout to vent 37 millim.

Two specimens from Hacienda el Florencio, Zacatecas, Mexico; collected by Dr. A. C. Buller.

7. *HYLA MICROCEPHALA*. (Plate XXXIX. fig. 3.)

Tongue circular, slightly nicked, and moderately free behind. Vomerine teeth in two small round groups between the choanæ. Head small, a little broader than long; snout rounded, as long as the diameter of the orbit; canthus rostralis distinct; loreal region slightly oblique; interorbital space broader than the upper eyelid; tympanum distinct, half the diameter of the eye. Fingers one-third webbed; no projecting rudiment of pollex; toes nearly entirely webbed; disks quite as large as the tympanum; subarticular tubercles moderate. The tibio-tarsal articulation reaches between the eye and the tip of the snout. Skin smooth above and on the throat, granular on the body. Pale brown above, uniform or with scattered dark brown dots; a dark brown streak on each side of the head and belly, passing through the eye and edged with whitish above; thighs pigmentless; white beneath. Male with a large external vocal sac.

From snout to vent 28 millim.

Two specimens, male and female, from Bebedero, Costa Rica; collected by Mr. Underwood.

Nearest allied to *H. uranochroa*, Cope.

8. *HYLA FALLAX*. (Plate XXXIX. fig. 4.)

Tongue circular, slightly nicked and free behind. Vomerine teeth in two small round groups on a level with the posterior borders of the choanæ. Head moderate, broader than long; snout rounded, as long as the diameter of the orbit; canthus rostralis indistinct; loreal region very oblique; interorbital space broader than the upper eyelid; tympanum distinct, half the diameter of the eye. Outer fingers almost half-webbed; no projecting rudiment of pollex; toes nearly entirely webbed; disks nearly as large as the tympanum; subarticular tubercles feeble. The tibio-tarsal articulation reaches between the eye and the tip of the snout. Skin smooth above and on the throat, granular on the belly. Dark purplish-brown above, with white markings, viz. a broad triangular blotch on the forehead, extending on the anterior half of the upper eyelid, a band on each side of the back, from the upper eyelid to the sacral region, and a subtriangular blotch on the coccygeal region; these markings enclosing a vase-shaped area of the ground-colour; a white blotch above the heel, and some white dots on the tibia.

From snout to vent 27 millim.

A single specimen from Katow, New Guinea; received from the Marquis G. Doria.

This tree-frog bears a striking superficial resemblance to the South-American *H. leucophyllata*, Beiris.

EXPLANATION OF THE PLATES.

PLATE XXXVIII.

- Fig. 1. *Phrynobatrachus perpalmatus*, p. 479.
 2. *Arthroleptis moorii*, p. 479.
 3. *Phrymixelus oxyrhinus*, p. 480.
 4. *Mantophryne robusta*, p. 480.

PLATE XXXIX.

- Fig. 1. *Hylodes alfredi*, p. 480.
 1 a. " " Open mouth.
 2. *Borborocates mexicanus*, p. 481.
 2 a. " " Open mouth.
 3. *Hyla microcephala*, p. 481.
 4. " *fallax*, p. 482.

4. Note on an Italian Newt, *Molge italica*.

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(Plate XL.)

I have recently described¹ a new Italian Newt discovered by me in the southern part of Italy. The kind permission of the Zoological Society to have this Newt figured in the Proceedings

¹ Boll. Mus. Zool. Anat. Comp. n. 317, 14 Maggio, 1898, vol. xiii.